IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sherry Leonard et al.

Serial No.:

08/956,518

Group No.: 1645

Filed:

10/23/97

Examiner:

R. Hayes

Entitled:

ALPHA-7 NICOTINIC RECEPTOR

TEMENT OF APPLICANTS UNDER 37 CFR § 1.251

Gary Kunz

United States Patent & Trademark Office

Arlington, VA 22202

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1:10

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV 001 613 469 US, addressed to: Gary Kunz, United States Patent & Trademark Office, Arlington, VA 22202

Dated: May 13, 2002

Sir:

The copy of the listed documents is a complete and accurate copy of Applicants' record of all of the correspondence between the Office and Applicants, for U.S. Patent Appln. Serial No. 08/956,518. Applicants are not aware of any correspondence between the Office and Applicants, for U.S. Patent Appln. Serial No. 08/956,518, that is not among Applicants' records.

Signing on behalf of:

Dated: May 13, 2002

David A. Casimir

Registration No. 42,395

MEDLEN & CARROLL, LLP 101 Howard Street, Suite 350 San Francisco, California 94105 415.904.6500

		:	Serial No.: 08/956,518	MC File No.: UTC -	03042 By: KTM
	E	70	In The Matter of the Application Of:	SHERRY LEONARD	et al.
/ 0			Date Mailed: 07/15/99	Due Da	ate: 07/09/99
MAY	13	Mar	The ollowing has been received in the	U.S. Patent and Trademark Office on	the date stamped hereon:
BETTON			Pages Plant Patent ApplicationPages Pages		☐ Transmittal Letter ☐ Duplicate ☐ Secretificate of Mailing
W	€ TR	ADE.	☐ Prov. Patent ApplicationPages	☐ Statement of Use	Cert. of Express Mailing Label No.:
			☐ Utility Patent ApplicationPages ☐ Information Disclosure Statement	☐ Trademark Renewal Application ☐ Section 8 & 15 Affidavits	X Check(s): \$ // O . O O
			☐ Form PTO-1449 and Copies of	☐ Specimens	▼ Deposit Account Authorization
			References Contained Thereon	□ Declaration/Oath/Affidavits	
			☐ Form PTO-1533 (Not. of Missing Parts)	Drawings: Sheet(s)	
	•	٠.,	☐ Certificate Re: Sequence Listing	☐ Formal ☐ Informal	D
		:	Sequence Listing in Paper Copy and on	Power of Attorney	FOR PTO USE
ar iri			Computer Readable Diskette	☐ Form PTO-1594/1595	7 0.11 10 002
•	•	1	Form PTOL-85B (Issue Fee Transmittal)	☐ Assignment	1
			Form PTO-1050 (Cert. of Correction)	Small Entity Declaration Amendment/Response to Restriction	
-		i	☐ Maintenance Fee Transmittal Form	All Amendment/Hesponse	
	•	:	☐ Reexamination Request	X Extension of Time Req.: Month(\$)	
		-	PCT ApplicationPages		
		i	☐ Chapter II Demand	Petition	-

28422

MEDLEN & CARROLL, LLP

220 MONTGOMERY ST., STE. 2200 PH. 415-705-8410 SAN FRANCISCO, CA 94104

BANK OF THE WEST SAN FRANCISCO MAIN OFFICE SAN FRANCISCO, CALIFORNIA 94104 90-78-1211

PAY

ONE HUNDRED TEN AND NO/100

TO THE ORDER OF

DATE 07/15/99

AMOUNT \$110.00

Commissioner of Patents & Trademarks

TWO SIGNATURES REQUIRED FOR AMOUNTS OVER \$500.00

#O28422# #121100782# 042005603#

MEDLEN & CARROLL, LLP

28422

07/15/99

Commissioner of Patents & Trademarks

\$110.00

INVOICE # 13948

response to restriction requirement



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sherry Leonard et al.

Serial No.:

08/956,518 10/23/97 Group No.: 1645

Examiner:

R. Hayes

Filed: Entitled:

ALPHA-7 NICOTINIC RECEPTOR

RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE

Assistant Commissioner for Patents Washington, D.C. 20231

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1:8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Dated: *[asil]*, 1999

By: ______

Marlene Garitano

Sir:

In response to the Notice to Comply mailed 03/23/99, please make the following amendments:

IN THE SPECIFICATION:

Please replace pages "89 to 122" with new pages --89 to 122-- (attached hereto), which contain the "substitute" Sequence Listing in this patent application.

REMARKS

This amendment reflects the introduction of a "substitute" Sequence Listing, finds support in the application and Figures, and does not introduce new matter.

CONCLUSION

Should the Examiner have any questions regarding the above or believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect.

Dated: 1 April 1999

Kamrin T. MacKnight Registration No. 38,230

MEDLEN & CARROLL, LLP 220 Montgomery Street, Suite 2200 San Francisco, California 94104 415.705.8410 Application No.:__f 6518

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

6	PE		attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FI 18230, May 1, 1990.	ants R
4	AY 1 3 2002	لقا	 This application does not contain, as a separate part of the disclosure on paper copy, a "Sequentiating" as required by 37 C.F.R. 1.821(c). 	ience
Y.	PADEM	,	3. A copy of the "Sequence Listing" in computer readable form has not been submitted as require 37 C.F.R. 1.821(e).	ed by
		×	4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, th content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.8 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."	ne 822
			5. The computer readable form that has been filed with this application has been found to be dan and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).	maged
			The paper copy of the "Sequence Listing" is not the same as the computer readable from of th "Sequence Listing" as required by 37 C.F.R. 1.821(e).	ne
			7. Other:	
		Аp	oplicant Must Provide:	
		X	An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".	
		X	An i nitial o r substitute paper copy of the "Sequence Listing", as well as an amendment directing into the specification.	its entry
		X	A statement that the content of the paper and computer readable copies are the same and, when applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).	re
		Fo	or questions regarding compliance to these requirements, please contact:	
			or Rules Interpretation, call (703) 308-4216	
		Fo	or CRF Submission Help, call (703) 308-4212	
		Fo	·	

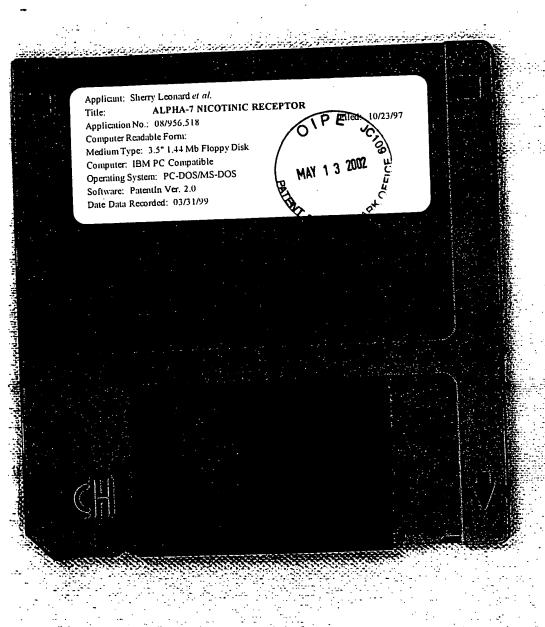
PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE



220 Montgomery Street Suite 2200 San Francisco, CA 94104

DISKETTE FNCLOSET









UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

08/956,518

SUITE 2200

KAMRIN T. MACKNIGHT

220 MONTGOMERY STREET

SAN FRANCISCO CA 94104

MEDLEN & CARROLL

10/23/97

FILING DATE

LEONARD

5

UTC-03042

EXAMINER

ATTORNEY DOCKET NO.

HM12/0609

FIRST NAMED INVENTOR

HAYES, R

ART UNIT

PAPER NUMBER

1645

DATE MAILED:

06/09/99

Besp. 7/9/99 RLD

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

RECEIVED

JUN 1 7 1999

MEDLEN & CARROLL

OIPE	Application No. 08/956,518 Examiner Robert C. Ha		Applicant(s) Leonard et al		
Office Action Summary MAY 1 3 2002			Group Art Unit 1645		
Response to communication(s) filed on				·	
☐ This action is FINAL.					
☐ Since this application is in condition for allowance exce in accordance with the practice under Ex parte Quayle,				its is closed	
A shortened statutory period for response to this action is is longer, from the mailing date of this communication. Fa application to become abandoned. (35 U.S.C. § 133). Ex 37 CFR 1.136(a).	ilure to respond with	nin the pe	riod for response v	vill cause the	
Disposition of Claims					
X Claim(s) 1-25		is/a	re pending in the a	pplication.	
Of the above, claim(s)		is/are	withdrawn from c	onsideration.	
Claim(s)			_ is/are allowed.		
Claim(s)					
Claim(s)) .	
Application Papers	-				
See the attached Notice of Draftsperson's Patent Draftsperson's Pa	awina Review, PTO-	948.			
☐ The drawing(s) filed on is/are o	=				
☐ The proposed drawing correction, filed on			☐disapproved.		
☐ The specification is objected to by the Examiner.		, p. 0 . 0 0			
☐ The oath or declaration is objected to by the Examin	er.				
Priority under 35 U.S.C. § 119					
☐ Acknowledgement is made of a claim for foreign price	ority under 35 U.S.C	. § 119(a)-(d).		
☐ All ☐ Some* ☐ None of the CERTIFIED cop	ies of the priority do	cuments	have been		
received.					
☐ received in Application No. (Series Code/Seria	Number)		•		
\square received in this national stage application from	the International Bu	reau (PC	Γ Rule 17.2(a)).		
*Certified copies not received:				·	
☐ Acknowledgement is made of a claim for domestic p	riority under 35 U.S	.C. § 119	(e).		
Attachment(s)					
☐ Notice of References Cited, PTO-892					
☐ Information Disclosure Statement(s), PTO-1449, Pap	er No(s).				
☐ Interview Summary, PTO-413	0.040				
 Notice of Draftsperson's Patent Drawing Review, PT Notice of Informal Patent Application, PTO-152 	U- 9 48				
Notice of informal rate it Application, F10-132					

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Application/Control Number: 08/956518 Page 2

Art Unit: 1645

DETAILED ACTION

Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1, 3-8, drawn to nucleic acid molecules encoding the alpha-7 nicotinic receptor, vectors and host cells, classified in class 435, subclass 325.
 - II. Claim 2, drawn to alpha-7 nicotinic receptor polypeptides, classified in class 530, subclass 350.
 - III. Claims 9-13, drawn to a method of detecting alpha-7 nicotinic receptor polynucleotides in a biological sample, classified in class 435, subclass 5.
 - IV. Claim 14-25, drawn to method of amplifying alpha-7 nicotinic receptor polynucleotides, classified in class 435, subclass 91.2.
- 2. The inventions are distinct, each from the other because of the following reasons:

Although there are no provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different products; restriction is deemed proper because these products appear to constitute patently distinct inventions for the following reason:

Groups I-II are directed to products that are physically and functionally distinct that involve nucleic acids or proteins. Each of these products can be prepared by different processes, such as though chemical synthesis or isolation from natural sources using various isolation/

Application/Control Number: 08/956518

Art Unit: 1645

purification procedures. For example, the polypeptides of Group II are fundamentally different molecules than the polynucleotides of Group I, which in turn can be used to clone proteins, detect expression of the gene product, or used as therapeutic agents in gene therapy. Alternatively, the proteins of Group II can be utilized to generate antibodies. It is pointed out that there is a proper distinction between these groups, since each product is not required in order for the other to exist. Thereby, these groups are distinct and separable for the reasons stated.

Page 3

Groups I and III-IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case, the nucleic acids can be used in materially different processes, such as to encode the full length protein or used in gene therapy. The method of detecting and amplifying nucleic acid molecules requires primers and appropriate salt and hybridization conditions, which are not required for the products of Group I. It is further noted that the methods of Groups III & IV do not require the products of Group II.

Although there are no provisions under the section for "Relation of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods; restriction is deemed proper because these methods appear to constitute patently distinct inventions for the following reason:

Application/Control Number: 08/956518 Page 4

Art Unit: 1645

Groups III-IV are directed to methods of detecting or amplifying nucleic acid molecules. Each of the methods require physically and functionally distinct elements. For example, the method for detecting the presence of a nucleic acid molecule is distinguished from the method for amplifying a nucleic acid by PCR of Group IV, in that the diagnostic method of Group III requires inclusion of labeled nucleotides, unlike the PCR method of Group IV, which requires appropriate primers. Moreover, the method involving generation of PCR reaction products require purification protocols specific to isolating and detecting small nucleic acid molecules, unlike the method of Group III. These inventions are, therefore, patentably distinct, since one is not required for the other.

3. Because these inventions are distinct for the reasons given above, they have acquired a separate status in the art as shown by their different classification, and the non-coextensiveness of the search and examination for each group would constitute an undue burden on the examiner to search and consider all the separable groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

Art Unit: 1645

named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

4. Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Donald E. Adams, Ph.D., Supervisory Patent Examiner at Donald.Adams@uspto.gov or 703-308-0570. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Robert Hayes whose telephone number is (703) 305-3132. The examiner can normally be reached on Monday through Thursday, and alternate Fridays, from 8:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached on (703) 308-3995. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

(PC)8

Robert C. Hayes, Ph.D. June 8, 1999

ANTHONY C. CAPUTA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600





Davis Highway

ijon at 8. program begins at 8:30

begins at 8

Cost: \$70 (Includes: prog nch on 8/24, rece**ja**j

Program includes:

Operations Issue:

atent Automation Initiatives) Strategic Planning h Policy 'Update

Dickinson Acting Commissioner of Patents and Trademarks Luncheon Speech by Q. Todd own Hall Meeting

Appeals and Interferences

Design Issues
Tours of the Technology Center

Demonstrations of Automation

Tools including Patentin

Panels of SPEs on current topics

For mor Information or to register by phone, call 703-308-1234; your payment can be made by credit card or check made payable to "BIO"





PRIOR ART STATEMENT DUE 3 MONTHS	1/23/98
FOREIGN FILING LETTER DUE	
FOREIGN FILING LETTER DUE 6 MONTHS UTILITY / 3 MONTHS DESIGN	4/23/98
FOREIGN EILING DEADLINE	
12 MONTHS UTILITY / 6 MONTHS DESIGN	10/23/98
TWENTY-ONE MONTHS SUSPENSE DATE	7/23/99
•	RW

Serial No.: —	MC File No.: UTC- 3	042 By: Ktm
In The Matter of the Application Of:	LEONARDO FT JES AL	
Date Mailed: 10/23/9子	Ø8/956518 Due Da	
The following has been received in the	U.S. Pater and the on	the date stamped hereon:
- Design Patent Application Pages	☐ Trademark Application / 97	Transmittal Letter Duplicate
☐ Plant Patent ApplicationPages	_ 110 1100011121111 Pp.11011111	☐ Certificate of Mailing \.
☐ Prov. Paten ApplicationPages		Cert. of Express Mailing Label No.:
✓ Utility Patent ApplicationPages		Em 12169 2361 US
☐ Information Disclosure Statement	☐ Section 8 & 15 Affidavits	S Check(s): \$ 491
☐ Form PTO-1449 and Copies of	☐ Specimens	E Deposit Account Authorization
References Contained Thereon	Declaration/Oath/Affidavits ()	<u> </u>
☐ Form PTO-1533 (Not. of Missing Parts)	Drawings: Sheet(s)	
☐ Certificate Re: Sequence Listing	☐ Formal 🖳 Informal	U
Sequence Listing in Paper Copy and on	Power of Attorney (weekec.)	FOR PTO USE
Computer Readable Diskette	☐ Form PTO-1594/1595	,
☐ Form PTOL-85B (Issue Fee Transmittal)	☐ Assignment	
☐ Form PTO-1050 (Cert. of Correction)	Small Entity Declaration	
☐ Maintenance Fee Transmittal Form	☐ Amendment/Response	
☐ Reexamination Request	Extension of Time Req.: Month(s)	
☐ PCT ApplicationPages	□ Notice of Appeal	
☐ Chapter II Demand	Petition	-
•		



POST OFFICE TO ADDRESSEE



EWJ5JP453PJN2





12 Noon 3 PM 1460

2nd Day 3rd Day

SEE REVERSE SIDE FOR THE SERVICE GUARANTEE AND LIMITS ON THE INSURANCE COVERAGE

CUSTOMER USE ONLY

X941951

FROM: (PLEASE PRINT)

Federal Agency Acct. No. or Postal Service Acct. No.

PHONE

APT 600 CA 94063-1827

ASSISTANT COMMISSIONER FOR PATENTS DC

DC 20231-0001

UTC-63042

MEDLEN & CARROLL 702 MARSHALL ST REDWOOD CITY

BOX PATENT APPLICATION



Four Hundred Ninety-One And 00/100

ORDER OF Honorable Commissioner of Patents & Trademarks

Express Mail Label No.: EM 121 692 361 US

DATE

23 October 1997

AMOUNT

\$491.00

TWO SIGNATURES REQUIRED FOR AMOUNTS OVER \$500.00

#O22740# 1:121100782: 042005603#

MEDLEN & CARROLL, LLP

22740



MEDLEN & CARROLL, LLP

22740

Client Code - Matter No.: UTC-03042

Description: PTO Filing Fee

23 October 1997

\$491.00